

What is claimed is:

1. A HDMI plug connector comprises an insulated housing, a terminal line separator, a metallic cover shell, a plurality of puncture terminals, a plastic outer shell, and a front cover, characterized in that the terminal line separator further consists of a terminal fixing plate and a line binder, when the puncture terminal is inserted in the insulated housing, the conduction lines are lined up on the line binder and punctured contact with the puncture terminals, followed by placing in the terminal fixing plate to secure the spacings among the puncture terminals.
2. A HDMI plug connector as in claim 1, wherein when the insulated housing and terminal line separator are integrated as an assembled part and inserted through the insertion opening of the front metallic shell, and the assembled part and the front metallic shell are further interlocked by use of the latch slot at the rear end of the metallic front shell and the latch lug on the insertion portion of the insulated housing, followed by incorporating the metallic rear shell by use of the protrusion on the metallic front shell and the latch hole on the metallic rear shell to form a compact metallic unit.
3. A HDMI plug connector as in claim 2, wherein the metallic unit is placed into the plastic outer shell, and the front cover is attached around the insertion opening of the front metallic shell, whereby the buckle on the front cover interlocks with a notch on the plastic outer shell, and the metallic unit is solidified inside the plastic outer shell, and the assembly of the HDMI plug connector is completed.
4. A HDMI plug connector as in claim 1, wherein the insulated housing consists of an insertion front at front part and a retaining platform at rear part, and the insulated housing also provides an insertion holder for the puncture terminal, wherein the insertion front is a flat projected body, which provides two rows of terminal receiving

slots 131 aligned at its top and bottom side extended throughout the portion from the insertion front 13 at the front part to the retaining platform at the rear part, and utilizes the curved contour shape at the bottom of both sides of the projected body to form an error proof design.

5. A HDMI plug connector as in claim 4, wherein the retaining platform is formed mainly by a horizontal T shape block combined with the insertion front, and a plurality of protrusions are furnished on the top and bottom ends for interlock with the latch slot on the metallic front shell, wherein the flat part of the horizontal T shape block forms the retaining platform, and the top and bottom sides of the retaining platform provide a seat for the terminal line separator, and a plurality of concaves on the top and bottom sides of the positioning block at the both sides of the retaining platform are furnished for insertion of the positioning pole of the terminal fixing plate of the terminal line separator.
6. A HDMI plug connector as in claim 1, wherein the terminal line separator consists of the terminal fixing plate and line binder, which are mated with each other in a convex and concave area, wherein a plurality of the ribs of different width are furnished on the inner side surface near the end sections of both long sides of the line binder, which keep in line with the same spacing between each rib for receiving the fixing protrusion of the terminal fixing plate, and the rib has a step like profile in order to interlock each other firmly.
7. A HDMI plug connector as in claim 6, wherein the projection placed on the long side end of the outside surface of the line binder has the same height as the convex poles, which are placed between two rows of positioning slots, and the height of the projection approximately equals to the thickness of the puncture terminal.
8. A HDMI plug connector as in claim 1, wherein a plurality of the fixing protrusions of

different thickness aligned in a row with the same spacing formed therein on the inner side surface near the end sections of both long sides of the terminal fixing plate for receiving conduction lines, and each fixing protrusion extended sideward from top forms a profile of arrow, wherein a plurality of the fixing insertion slots are furnished on the concave section formed between the fixing protrusions of the terminal fixing plate for insertion of the puncture terminals, and the position of the insertion slot is interlaced corresponding to the position of the puncture terminal. Two positioning poles are provided in diagonal on each short side of the fixing protrusion and tightly mated with the concave on the insulated housing.

9. A HDMI plug connector as in claim 2, wherein the metallic cover shell consists of the front and rear part, wherein the appearance of the metallic front shell is similar to the insertion front of the insulated housing for receiving the insertion front, and the metallic front shell is furnished with a plurality of the latch slot and the lugs on the top and bottom of the long side surface, whereby the latch slot interlocks the latch lug on the retaining platform of the insulated housing, and the protrusion interlocks the latch holes on the metallic rear shell.
10. A HDMI plug connector as in claim 2, wherein the metallic rear shell of a rectangular body having a front hollowed opening attaches a hollowed cylindrical tube at the rear end to provide a sufficient inner space for receiving the conduction line, and the positions of the latch holes furnished on the front end of the metallic rear shell are in correspondence with the positions of the lugs on the metallic front shell, wherein the stops furnished on a suitable spot of both sides of the narrow plate of the metallic rear shell, which may prevent a further movement by use of an inward slant stop thrusting against the side edge of the rectangular section of the accommodated metallic front shell.

11. A HDMI plug connector as in claim 3, wherein the plastic outer shell is adapted for receiving the metallic rear shell incorporated with the metallic front shell and firmly housing the metallic rear shell, a plurality of notches are furnished on the front end of the top and bottom sides of the plastic outer shell, the number and position of the notches correspondingly match the same of the buckles on the front cover.
12. A HDMI plug connector as in claim 2, wherein the front cover has an opening similar to the insertion front and metallic front shell, so it may confine the front part of the metallic front shell and thrust against the metallic front shell at the rectangular section of the metallic front shell, and a plurality of buckles are furnished on the top and bottom sides of the frame of the front cover.
13. A HDMI plug connector as in claim 1, wherein the puncture terminal is formed into a strip by punching a flexible conductive material, whereby the base extends to the two ends to form one end as an inserting contact portion and the other end as a conduction line contact portion. The inserting contact portion has a plurality of tooth spike for use of fixing terminals, and on the opposite side of the tooth spike a flexible contact is formed with a curvature at its end, furthermore, at the end of the conduction line contact portion there is formed a line puncture with a U-shape for easy puncture of conduction lines.